

LITERATURE

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Photuris lloydi sp. nov.
(Coleoptera: Lampyridae)

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Photuris lloydi sp. nov.

Type locality, Highlands County, Florida. Twelve specimens, all males, were collected in this county by Dr. James E. Lloyd; one of these, his No. 6524, was selected as the type specimen. Five other specimens were collected by Dr. Lloyd in Alachua and Levy Counties, approximately 300 km north of Highlands Co.

Dimensions, 9.6 mm long (elytra plus pronotum) by 3.4 mm wide at elytral half-length.

Outline subparallel, slightly widest at elytral half-length.

Pronotum 1.9 mm long by 2.1 mm broad just forward of angles. Angles 90°, rounded. Base of the form frequent in *Photuris*, with a median small indentation from each side of which a slightly arcuate edge leads to a rather marked crease at the interior side of the angle. Disk slightly convex with a longitudinal black vitta similar to that of *P. versicolor*, on each side of which is a subelliptic orange spot. Margins transparent, with some opaque white mottling. Orange spots and black vitta coarsely punctate. Villosity pale, sparse, and short, but long hairs on edge of base.

Scutellum white, apex acute. Mesonotal plates dull yellowish.

Elytra, each 7.65 mm long and 1.71 mm wide at midlength; 1.32 mm wide at humerus. Coarsely granulate. Villosity pale, fairly long and dense. Ground color black; margins and suture white, continuous around apices; a narrow but pronounced sharply defined white vitta to about two-third elytral length. No evident costae. Wings black.

Head: Frons yellow, slightly concave, with short pale hairs; vertex brown. Interocular margins divergent; 0.4 mm between eyes over antennal sockets and 0.75 mm. across vertex. 2.0 mm across eyes in front, eye length 1.2 mm; eyes proportionately large and appear globular in side view. Clypeus dark brown, tridentate. Mandibles rather small, 0.5 mm across in closed position. Maxillary palpi black; labial palpi mitten-shaped, black.

Antennae black, hairy; articles narrowly white at bases; articles 2 and 3 subequal. Total length *ca.* 4.85 mm, 0.5 of body length.

Prosternum white; meso- and metasterna very dark brown.

Ventral segments 2 to 5 black; 6 and 7 luminous and about two times as long as 5; 8 rather long, pale yellowish, medially short-mucronate; 9 long-ogival.

Coxae pale, almost white. Posterior femora white except at distal ends; tibiae largely black; tarsi black, bases of articles pale. Posterior legs 8.4 mm long, 0.87 of body length; tibiae alone 2.3 mm long.

Aedeagus as in *P. versicolor*, 1.8 mm long.

Typical male flash pattern consists of single coruscations *ca.* 0.2 second long, at 4 to 5 second intervals at 75° F, and up to 0.75 sec. long at 58° F. Shorter intervals and longer flashes, sometimes flickering, were also seen. Female response at 0.2–0.5 sec. after male flash.

Type and fifteen paratypes returned to Dr. Lloyd; two paratypes, Lloyd's Nos. 6521 and g12, retained in my collection. The type has been placed in the collection of Cornell University.

There was very little variation among the specimens. Those from Highlands County were from 9.15 to 11.45 mm long,



FIG. 1. *Photuris lloydii* sp. nov.

averaging 10.42 mm; those from Alachua and Levy Counties were slightly larger. Several very similar specimens, including a female, collected at Bradenton, Florida, on the Gulf Coast, were submitted by Miss Anne M. Yech; these appear to be the same species as Dr. Lloyd's specimens but flash records were not available. Confusion with *P. hebes* is avoided by the larger size of the latter and its longer antennae; *hebes* is also usually lighter colored and the pronotal vitta narrower.

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Information. Titles are arranged by subject matter: Part I, Radioisotopes: Ecology, Physiology and Biochemistry, Development and Genetics, Vectors, Chemical Control. Part II, Ionizing Radiations: Basic Research on genetic, cellular and genetic effects, Applications, Techniques, Bibliographies and Surveys. Finally there are a few papers on nematodes also. There is a total of 1,592 titles, each with an abstract. The author's index includes the author's institution or laboratory. The detailed subject index indicates also the particular isotope or radiation used. An insecticide index gives the manufacturer's and common names, and there are 25 pages of tables that give data on dispersal, on sterilization, and on insecticides.